

Amendments To the Claims:

Please amend the claims as shown.

1. (currently amended) A Premix burner (1) comprising:  
an annular air channel (3) for guidance of combustion air (4) along a flow direction; and  
a fuel inlet (11) for feeding fuel (5) into said combustion air (4),  
wherein a profiling means (2) is located in said air channel (3) upstream of said fuel inlet (11) for  
profiling the mass stream of said combustion air (4) in a direction perpendicular to said flow  
direction, wherein according to said profiling, a fuel density downstream said fuel inlet (11)  
varies along every radial direction ( $R$ ) through said annular air channel (3).
2. (currently amended) A Burner (1) according to claim 1, wherein the profiling means (2) is a  
perforated, annular shaped metal plate, wherein every hole (13) of said plate (2) has a respective  
hole area, thereby forming a hole area density of said metal plate and wherein said hole area  
density varies in a radial direction ( $R$ ).
3. (currently amended) A Burner (1) according to claim 2, wherein the hole area density  
increases in an outward radial direction ( $R$ ).
4. (currently amended) A Burner (1) according to claim 1, wherein the profiling means (2) is a  
grid.
5. (currently amended) A Burner (1) according to claim 1, wherein the profiling means (2) is a  
sieve.
6. (currently amended) A Burner (1) according to claim 1, wherein the profiling is such that  
said mass stream of said combustion air (4) increases in an outward radial direction ( $R$ ).
7. (currently amended) A Burner (1) according to claim 1, wherein the annular air channel (3)  
encircles a central diffusion burner (16).

8. (currently amended) A ~~G~~as turbine (110), comprising ~~with~~ a premix burner (1) according to one of the preceding claims, wherein the premix burner comprising:  
an annular air channel for guidance of combustion air along a flow direction; and  
a fuel inlet for feeding fuel into said combustion air,  
wherein a profiling means is located in said air channel upstream of said fuel inlet for profiling  
the mass stream of said combustion air in a direction perpendicular to said flow direction,  
wherein according to said profiling, a fuel density downstream said fuel inlet varies along every  
radial direction through said annular air channel.
9. (currently amended) A ~~P~~rocess for burning fuel (5) in air (4), comprising:  
~~the steps of~~  
guiding air through an annular channel (3) of a premix burner (1);  
profiling the mass stream of said air (4) in such a way that the mass stream varies along every radial direction ( $\rightarrow R$ ) through said annular air channel (3);  
feeding fuel (5) into said profiled air stream at a fuel inlet (11), thereby generating a fuel/air mixture with varying fuel density along every radial direction ( $\rightarrow R$ ) through said annular air channel (3); and  
igniting and burning said fuel/air mixture.
10. (new) A gas turbine according to claim 8, wherein the profiling means of the burner is a perforated, annular shaped metal plate, wherein every hole of said plate has a respective hole area, thereby forming a hole area density of said metal plate and wherein said hole area density varies in a radial direction.
11. (new) A gas turbine according to claim 10, wherein the hole area density increases in an outward radial direction.
12. (new) A gas turbine according to claim 8, wherein the profiling means is a grid.
13. (new) A gas turbine according to claim 8, wherein the profiling means is a sieve.

14. (new) A gas turbine according to claim 8, wherein the profiling is such that said mass stream of said combustion air increases in an outward radial direction.

15. (new) A gas turbine according to claim 8, wherein the annular air channel encircles a central diffusion burner.

**Amendments To the Abstract:**

Please amend the section heading at page 15 line 1, as follows:

**ABSTRACT OF THE INVENTION**

Please amend the paragraph at page 15 lines 3 to 14, as follows:

The invention relates to a premix burner (1) for burning fuel (5) with air (4) to combustion gas, in particular within a combustion turbine. Profiling means (2) are provided for profiling the mass stream of the combustion air (4) in a direction radial to an annular shaped air channel (3) in order to generate a radial varying fuel/air mixture that stabilises the combustion. Accordingly, the invention also relates to a gas turbine (110) and a process for burning fuel in air.

**Fig. 1**